

REMARKS

Claims 1-35 are pending in the application.

§102 Rejections

Claims 1-4, 6-8, 12-18, and 20-24 were rejected under 35 USC § 102(b) as being anticipated by Mueller ("Chronology Timing Designer V1.2"). Applicant respectfully traverses the rejections of claims 1-4, 6-8, 12-18, and 20-24.

Claims 1 and 15 recite "... *releasing* the node if a predetermined condition is met and creating therefrom a released node" (emphasis added) Claim 20 recites "... *release* means for releasing the node upon satisfaction of a condition" (emphasis added) Claim 24 recites "... a *release* module releasing the initial condition" (emphasis added)

In contrast, Mueller fails to teach a "release" element. Mueller teaches CREATING SIGNALS (using a mouse pointer to identify transitions in a signal), CREATING CLOCKS (entering clock definition parameters in a dialog box) and DELAYS AND CONSTRAINTS (specifying gate delays and setup and hold times). Hence, since Mueller fails to teach the "release" element, Mueller does not teach each of the elements of claims 1, 15, 20 and 24. Thus, the office action fails to state a *prima facie* case of anticipation with respect to claims 1, 15, 20 and 24.

Claims 2-4 and 6-7 are dependent on claim 1, claims 16-18 are dependent on claim 15 and claims 21-23 are dependent on claim 20. For reasons analogous to those provided above and elements in the claims, applicant respectfully submits that the office action fails to state a *prima facie* case of anticipation with respect to claims 2-4, 6-7, 16-18 and 21-23.

Therefore, applicant requests withdrawal of the rejections and reconsideration and allowance of claims 1-4, 6-7 and 20-24.

Claim 8 recites "... providing an indication when the node is in an undesirable condition"

In contrast, Mueller fails to teach a "... providing an indication when the node is in an undesirable condition." Mueller teaches CREATING SIGNALS (using a mouse pointer to identify transitions in a signal), CREATING CLOCKS (entering clock definition parameters in a dialog box) and DELAYS AND CONSTRAINTS (specifying gate delays and setup and hold

times). Hence, since Mueller fails to teach the ". . . providing an indication when the node is in an undesirable condition" element, Mueller does not teach each of the elements of claims 8.

Thus, the office action fails to state a *prima facie* case of anticipation with respect to claim 8.

Claims 12-14 are dependent on claim 8. For reasons analogous to those provided above and elements in the claims, applicant respectfully submits that the office action fails to state a *prima facie* case of anticipation with respect to claims 12-14.

Therefore, applicant requests withdrawal of the rejections and reconsideration and allowance of claims 8 and 12-14.

Claims 25-27 were rejected under 35 USC § 102(b) as being anticipated by IEEE 1164 ("Standard Multivalue Logic System for VHDL...") Applicant respectfully traverses the rejection of claims 25-27.

Claim 25 recites ". . . a means for maintaining a logic level of a simulated circuit node until a *release* condition is met." (emphasis added) In contrast, IEEE 1164 fails to teach meeting a "release" condition element. The office action cites to pages 2-4 of IEEE 1164 to support the anticipation rejection. Applicant has studied pages 2-4 of IEEE 1164 and respectfully submits that pp. 2-4 do not teach ". . . until a *release* condition is met" (emphasis added) More, specifically, IEEE 1164 at pages 2-4 fails to discuss the concept of a release condition. Hence, since IEEE 1164 fails to teach a release condition, IEEE 1164 does not teach each of the elements of claim 25. Thus, the office action fails to state a *prima facie* case of anticipation with respect to claim 25.

Claims 26-27 are dependent on claim 25. For reasons analogous to those provided above and elements in the claims, applicant respectfully submits that the office action fails to state a *prima facie* case of anticipation with respect to claims 26-27.

Therefore, applicant requests withdrawal of the rejections and reconsideration and allowance of claims 25-27.

§103 Rejection of the Claims

Claims 5, 9-11, and 19 were rejected under 35 USC § 103(a) as being unpatentable over Mueller in view of IEEE 1164, and further in view of Ralston (Encyclopedia of Computer Science). Applicant respectfully traverses the rejection of claims 5, 9-11, and 19.

The office action must provide specific, objective evidence of record for a finding of a suggestion or motivation to combine reference teachings and must explain the reasoning by which the evidence is deemed to support such a finding. *In re Sang Su Lee*, 277 F.3d 1338, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002). The reasons provided in paragraphs 57-61 for combining the teachings of the references, such as, "identifying variables irrelevant to the particular function being represented" have no relevance to the claimed subject matter. Claim 5, 9-11, and 19 include elements of "unknown logic values" or "unknown logic levels." Unknown logic values or levels are not irrelevant (as suggested in the office action) -- they are just unknown. Hence, the office action fails to provide reasoning, as required by *In re Sang Su Lee*, that supports a suggestion or motivation to combine. Thus, the office action fails to state a *prima facie* case of obviousness with respect to claims 5, 9, 10, 11 and 19. Therefore, applicant requests withdrawal of the rejections and reconsideration and allowance of claims 5, 9, 10, 11 and 19.

Claims 1-5, 7, 29, and 30 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Tzartzanis ("Verilog for Behavioral Modeling") in view of De Micheli ("Synthesis and Optimization of Digital Circuits"). Applicant respectfully traverses the rejection of claims 1-5, 7, 29, and 30.

Claim 1 recites, ". . . *releasing* the node if a predetermined condition is met and creating therefrom a released node" (emphasis added) The office action, in paragraph 62, asserts that this element is taught by De Micheli. Applicant respectfully disagrees. De Micheli fails to teach or suggest "releasing" a node, as recited in claim 1. De Micheli in example 3.2.5 only teaches "a finite-state machine that recognizes two or more consecutive 1s in an input data stream." There is no teaching or suggestion of "releasing" a node in De Micheli. In addition, Tzartzanis, as stated in the office action at paragraph 62, also fails to teach or suggest "releasing" a node. Hence, neither of the references, either alone or in combination, teach or suggest each of the elements of claim 1. Thus, the office action fails to state a *prima facie* case of obviousness with respect to claim 1.

Claims 2-5 and 7 are dependent on claim 1. For reasons analogous to those provided above and elements in the claims, applicant respectfully submits that the office action fails to state a *prima facie* case of obviousness with respect to claims 2-5 and 7.

Claim 29 recites, "means for releasing an initial condition." The office action, in paragraph 68, asserts that De Micheli teaches this element. Applicant respectfully disagrees that De Micheli teaches or suggests this element for the reasons argued above with respect to claim 1 above. Thus, the office action fails to state a *prima facie* case of obviousness with respect to claim 29.

Claim 30 is dependent on claim 29. For reasons analogous to those provided above and elements in the claims, applicant respectfully submits that the office action fails to state a *prima facie* case of obviousness with respect to claim 30.

Therefore, applicant requests withdrawal of the rejections and reconsideration and allowance of claims 1-5, 7, 29, and 30.

Claims 6, 8, 12-14, and 19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Tzartzanis in view of Mueller. Applicant respectfully traverses the rejection of claims 6, 8, 12-14, and 19.

Claims 6, 8, and 12-14 include a recitation to *release*, *releasing* or *released*. For reasons argued above, neither Tzartzanis nor Mueller, either alone or in combination, teach or suggest *release*, *releasing*, or *released* as used in claims 6, 8, 12-14, and 19. Thus, the office action fails to state a *prima facie* case of obviousness with respect to claims 6, 8, 12-14 and 19. Therefore, applicant requests withdrawal of the rejections and reconsideration and allowance of claims 6, 8, 12-14, and 19.

Claims 15-18, 20-28, and 33-35 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Tzartzanis in view of De Micheli and further in view of Mueller. Applicant respectfully traverses the rejection of claims 15-18, 20-28, and 33-35.

Claim 15 recites, ". . . *releasing* the node if a predetermined condition is met and creating therefrom a released node" (emphasis added) Claim 20 recites, ". . . *release* means for releasing the node upon satisfaction of a condition" (emphasis added) Claim 24 recites, ". . . a *release* module releasing the initial condition" (emphasis added) Claim 25 recites, "maintaining a logic level of a simulated circuit node until a *release* condition is met." (emphasis added) Claim 28 recites, "an initial condition module having an initial condition

release means." (emphasis added) Claims 33 and 34 recite, "*releasing* the node." (emphasis added)

The office action states, at paragraph 62, that Tzartzanis does not teach "releasing a node." Applicant has argued above that neither De Micheli nor Mueller teach or suggest the concept of *release*, so neither Tzartzanis, De Micheli, nor Mueller, either alone or in combination, teach or suggest *release* as used in claims 15, 20, 24, 25, 28, 33, and 34. Thus, the office action fails to state a *prima facie* case of obviousness with respect to claims 15, 20, 24, 25, 28, 33, and 34.

Claims 16-18 are dependent on claim 15. Claims 21-23 are dependent on claim 20. Claims 26 and 27 are dependent on claim 25. Claim 35 is dependent on claim 34. For reasons analogous to those provided above, applicant respectfully submits that the office action fails to state a *prima facie* case of obviousness with respect to claims 16-18, 21-23, 26-27 and 35.

Therefore, applicant requests withdrawal of the rejections and reconsideration and allowance of claims 15-18, 20-28, and 33-35

Claim 31 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Mueller in view of Tzartzanis and further in view of Ralston. Applicant respectfully traverses the rejection of claim 31.

Claim 31 recites, "a first output submodule outputting a first indication when the first node condition is in an *undesirable state*." (emphasis added) Applicant has studied the cited references and fails to see where any of them, either alone or in combination, teach or suggest "an undesirable state." The office action doesn't seem to cite to a reference that teaches or suggests this element. Hence, the references fail to teach or suggest each of the elements of claim 31. Thus, the office action fails to state a *prima facie* case of obviousness with respect to claim 31. Therefore, applicant requests withdrawal of the rejection and reconsideration and allowance of claim 31.

Claim 32 was rejected under 35 USC § 103(a) as being unpatentable over Tzartzanis in view of De Micheli and further in view of Ralston. Applicant respectfully traverses the rejection of claim 32.

The office action asserts in paragraph 93 that De Micheli teaches release conditions. Applicant respectfully disagrees. Applicant submits that De Micheli teaches a generic programming IF-THEN-ELSE construct. In general, De Michelli teaches generic programming

constructs, but De Micheli does not teach the "release condition" element because the "release condition" element of claim 32 can cause the output of the first node condition to be passed to the second input means. A generic IF-THEN-ELSE programming construct, as taught by De Micheli, does not teach or suggest this operation. Hence, since De Micheli fails to teach or suggest the "release" element, De Micheli does not teach each of the elements of claim 32. Thus, the office action fails to state a *prima facie* case of obviousness with respect to claim 32. Therefore, applicant requests withdrawal of the rejections and reconsideration and allowance of claim 32.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone applicant's attorney at 612-371-2109 to facilitate prosecution of the application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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By their Representatives,

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Date April 8, 2003

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner of Patents, Washington, D.C. 20231, on this 8th day of April 2003.

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